



STATE OF DELAWARE  
EXECUTIVE DEPARTMENT  
OFFICE OF MANAGEMENT AND BUDGET  
STATE PLANNING COORDINATION

May 25, 2006

Mr. Nicholas Vacirca  
Christina School District  
925 Bear-Corbitt Road  
Bear, DE 19701

RE: PLUS review – PLUS 2006-04-02; Delaware School for the Deaf

Dear Mr. Vacirca:

Thank you for meeting with State agency planners on May 3, 2006 to discuss the proposed plans for the Delaware School For the Deaf to be located adjacent to the north side of Delaware Route 4, east of Cherokee Woods Drive.

According to the information received, you are planning the construction of a 120,200 sq. ft. education building and a 15,500 sq. ft. residential hall.

Please note that changes to the plan, other than those suggested in this letter, could result in additional comments from the State. Additionally, these comments reflect only issues that are the responsibility of the agencies represented at the meeting. The developers will also need to comply with any Federal, State and local regulations regarding this property. We also note that as New Castle County is the governing authority over this land, the developers will need to comply with any and all regulations/restrictions set forth by the County.

**Executive Summary**

The following section includes some site specific highlights from the agency comments found in this letter. This summary is provided for your convenience and reference. The full text of this letter represents the official state response to this project. *Our office*

*notes that the applicants are responsible for reading and responding to this letter and all comments contained within it in their entirety.*

### **State Strategies/Project Location**

- The proposed project is in a Level 1 Investment area according to the Strategies for State Policies and Spending. In these areas, state policies support development that is consistent with the character of the area.

### **Street Design and Transportation**

- As proposed, the plan shows a secondary access road connecting by way of Johnson Road into the Chestnut Hill Estates subdivision. DelDOT strongly supports this access in concept, but there are issues that will need to be resolved.

### **Natural and Cultural Resources**

- It is strongly recommended that you contact DNREC to schedule a preliminary meeting to discuss the sediment and erosion control and stormwater management components of the plan. The site topography, soils mapping, pre- and post-development runoff, and proposed method(s) and location(s) of stormwater management should be brought to the meeting for discussion. Since infiltration is planned for this site, preliminary soil investigation and testing results would be recommended at the time of the meeting as well.

Removal of trees from the wooded area should be minimized particularly on the steep slopes where erosion problems are likely to develop if the soil is disturbed.

The following are a complete list of comments received by State agencies:

#### **Office of State Planning Coordination – Contact: Herb Inden 577-5188**

The proposed project is in a Level 1 Investment area according to the Strategies for State Policies and Spending. In these areas, state policies support development that is consistent with the character of the area.

#### **Division of Historic and Cultural Affairs – Contact: Alice Guerrant 739-5685**

This parcel has the remnant of a known prehistoric-period archeological site on it, much of which was tested by DelDOT and then destroyed by the widening of Route 4. In

addition, the Beers atlas of 1868 shows the T. Simpers House, which no longer extant, within this parcel.

Small, rural, family cemeteries often are found in relation to historic farm complexes, such as the Knight house, usually a good distance behind or to the side of the house. The developer should be aware of Delaware's Unmarked Human Remains Act of 1987, which governs the discovery and disposition of such remains. The unexpected discovery of unmarked human remains during construction can result in significant delays while the process is carried out. The Division of Historical and Cultural Affairs will be happy to discuss these issues with the developer; the contact person for this program is Faye Stocum, 302-736-7400.

If the school district uses any federal funds for this project, it will be required to consult with this office under Section 106 of the National Historic Preservation Act of 1966 (as amended) and may be required to undertake an archaeological survey of the property. The DHCA will be happy to assist the agency through this process. If no federal funding or permit is part of the project, we would appreciate the opportunity to look for archeological site on the property and learn something about their location, nature, and extend prior to any construction activities.

**Department of Transportation – Contact: Bill Brockenbrough 760-2109**

- 1) The proposed development meets New Castle County's warrants for requiring a traffic impact study (TIS) and the District is seeking a waiver of that requirement. The school does not meet our current warrants for requiring a traffic impact study (TIS). Regarding the District's application for a waiver of the County's requirement, we believe they would qualify for one. Should the County decide to issue a waiver, we recommend that they require improvements consistent with the recommendations of DelDOT's 1996 Churchmans Crossing Study. That study recommended transit stops on Route 4 at Todd Lane and at Augusta Drive and a Class I bikeway (separate facility) on Route 4 from Elkton Road to Delaware Route 7. Given the age of that study, it will be necessary to review those recommendations further to determine whether they need to be updated.
- 2) As proposed, the plan shows a secondary access road connecting by way of Johnson Road into the Chestnut Hill Estates subdivision. DelDOT strongly supports this access in concept, but there are issues that will need to be resolved. The issues DelDOT has identified are as follows:
  - a) To DelDOT's knowledge, clear rights-of-way for Johnson Road only exist for stub streets in the Chestnut Hill Estates and Cherokee Woods

subdivisions. According to our mapping, for about 720 feet in between those stubs, what would be a right-of-way is divided lengthwise between the School District (Tax Parcel 09-028.00-118) and Our Redeemer Evangelical Lutheran Church (Tax Parcel 09-028.00-064). While there is a driveway extending down that property line for about 380 feet, which serves both the church and structures owned by the District, any right of either party to use that driveway is apparently by easement.

At the PLUS meeting, the District indicated that a 50-foot privately maintained right-of-way does exist. If it does, DelDOT recommends that the District widen the right-of-way to 60 feet (30 feet on center) if possible, dedicate the right-of-way to public use if that has not been done, improve the street to DelDOT standards and submit it for acceptance into State maintenance. If the right-of-way does not exist, we recommend that they work with the church to establish it. If the church is not amenable to that, we recommend that the District dedicate a 30-foot half right-of-way for Johnson Road between Chestnut Hill Estates and Cherokee Woods and continue to use the existing driveway.

- b) Right-of-way issues aside, there is a gap of 340 feet between the Chestnut Hill Estates and Cherokee Woods sections of Johnson Road, in which not even a driveway exists. From DelDOT's perspective, it would be desirable for Johnson Road to connect through, and thus provide an alternative means of access to Cherokee Woods.
  - c) As the site is presently designed, the site road connecting to Johnson Road would separate the educational building from one of the main parking lots. Further, the road would be curving around the building in that area. This situation could pose a hazard for people walking between the building and the parking lot. A well-delineated crosswalk with appropriate signs and pavement markings would be helpful in that regard. The District should also consider placing a gate on their access to Johnson Road to prevent cut-through traffic.
- 3) When a more definite plan for the property is proposed, the developer's site engineer should contact Mr. Pao Lin, our Subdivision Manager for New Castle County, regarding DelDOT specific requirements for access. He may be reached at (302) 760-2157.

**The Department of Natural Resources and Environmental Control – Contact:  
Kevin Coyle 739-9071**

**Soils**

According to the New Castle County soil survey mapping Matapeake and Sassafras were mapped on subject parcel. Matapeake and Sassafras are well-drained upland soils that, generally, have few limitations for development.

**Impervious Cover**

Studies have shown that once a watershed exceeds a threshold of 10 percent imperviousness, water and habitat quality irreversibly decline. Although no imperviousness cover figure was disclosed in the PLUS application, given the projected scope and density of this project (from site plan), the amount of imperviousness generated by this project is likely to far exceed than the desirable watershed threshold of 10 percent. Therefore, the applicant is strongly advised to pursue best management practices (BMPs) that mitigate or reduce some of the most likely adverse impacts. Reducing the amount of surface imperviousness through the use of pervious paving materials (“pervious pavers”) in lieu of asphalt or concrete in conjunction with an increase in forest cover preservation or additional tree plantings are examples of practical BMPs that could easily be implemented to reduce surface imperviousness.

**TMDLs**

With the adoption of Total Maximum Daily Loads (TMDLs) as a “pollution-mitigation strategy” for reducing pollutants that affect water quality in this watershed, reductions of bacterial and/or nutrient loading will be mandatory in this watershed. A TMDL is the maximum level of pollution allowed for a given pollutant below which a “water quality limited water body” can assimilate and still meet water quality standards to the extent necessary to support use goals such as, swimming, fishing, drinking water and shell fish harvesting. The pollutant deemed to be the greatest impediment to meeting water quality goals to date in the White Clay Creek watershed – the watershed in which this proposed development is located - is bacteria. An 87% reduction will be required to meet TMDL reduction requirements for bacteria. TMDL reductions for nitrogen and phosphorus, in contrast, are still pending review. The developer is encouraged to be proactive and employ the following Best Management Practices (BMPs) and/or Best Available Technologies (BATs): reduction or mitigation for all created forms of surface imperviousness, reductions in the amount of forest cover removal, and use of innovative “green-technology” stormwater methodologies rather than conventional open-water

stormwater management structures. Sincere implementation of these BMPs will help ensure that this development meet potential future TMDL reduction requirements.

### **Water Supply**

The project information sheets state water will be provided to the project by United Water Delaware via a public water system. DNREC records indicate that the project is located within the public water service area granted to United Water Delaware under Certificate of Public Convenience and Necessity 88-CPCN-03.

Should dewatering points be needed during any phase of construction, a dewatering well construction permit must be obtained from the Water Supply Section prior to construction of the well points. In addition, a water allocation permit will be needed if the pumping rate will exceed 50,000 gallons per day at any time during operation.

All well permit applications must be prepared and signed by licensed water well contractors, and only licensed well drillers may construct the wells. Please factor in the necessary time for processing the well permit applications into the construction schedule. Dewatering well permit applications typically take approximately four weeks to process, which allows the necessary time for technical review and advertising.

Should you have any questions concerning these comments, please contact Rick Rios at 302-739-9944.

### **Sediment and Erosion Control/Stormwater Management**

A detailed sediment and stormwater plan will be required prior to any land disturbing activity taking place on the site. The plan review and approval as well as construction inspection will be coordinated through DNREC Division of Soil and Water Conservation Sediment and Stormwater Program. Contact Elaine Webb with the Sediment and Stormwater Program at (302) 739-9921, for details regarding submittal requirements and fees.

A Notice of Intent (NOI) for Stormwater Discharges Associated with Construction Activity must be submitted to DNREC Division of Soil and Water Conservation along with the \$195 NOI fee prior to plan approval.

Applying practices to mimic the pre-development hydrology on the site, promote recharge, maximize the use of existing natural features on the site, and limit the reliance on structural stormwater components, such as maintaining open spaces, should be considered in the overall design of the project as a stormwater management technique.

Green Technology BMPs must be given first consideration for stormwater quality management. Each stormwater management facility should have an adequate outlet for release of stormwater. Any discharges to the DelDOT highway drainage system will require the approval of DelDOT.

It is strongly recommended that you contact DNREC to schedule a preliminary meeting to discuss the sediment and erosion control and stormwater management components of the plan. The site topography, soils mapping, pre- and post-development runoff, and proposed method(s) and location(s) of stormwater management should be brought to the meeting for discussion. Since infiltration is planned for this site, preliminary soil investigation and testing results would be recommended at the time of the meeting as well.

Removal of trees from the wooded area should be minimized particularly on the steep slopes where erosion problems are likely to develop if the soil is disturbed.

### **Forest Preservation**

Forest removal should be minimized as much as possible because wildlife that currently inhabit this woodlot will have to disperse into the surrounding area and little suitable habitat exists in this heavily developed area. This type of displacement can result in an increase in human/animal conflicts, including interactions on the roadways. DNREC also recommends that clearing not occur April 1st to July 31st to minimize impacts to birds and other wildlife that utilize forests for breeding.

### **Underground Storage Tanks**

There are two active/inactive LUST sites located near the proposed project:

Ogletown Mobil, Facility # 3-001497, Project # N0007086

Kirk Middle School, Facility # 3-001623, Project # N9509225

No environmental impact is expected from the above inactive/active LUST sites. However, should any underground storage tank or petroleum contaminated soil be discovered during construction, the Tank Management Branch must be notified as soon as possible. It is not anticipated that any construction specifications would need to be changed due to petroleum contamination. However, should any unanticipated contamination be encountered and PVC pipe is being utilized, it will need to be changed to ductile steel with nitrile rubber gaskets in the contaminated areas.

**State Fire Marshal's Office – Contact: John Rossiter 739-4394**

These comments are intended for informational use only and do not constitute any type of approval from the Delaware State Fire Marshal's Office. At the time of formal submittal, the applicant shall provide; completed application, fee, and three sets of plans depicting the following in accordance with the Delaware State Fire Prevention Regulation (DSFPR):

a. **Fire Protection Water Requirements:**

- Water distribution system capable of delivering at least 1000 gpm for 1-hour duration, at 20-psi residual pressure is required. Fire hydrants with 800 feet spacing on centers.
- Where a water distribution system is proposed for (educational, dormitory) sites, the infrastructure for fire protection water shall be provided, including the size of water mains for fire hydrants and sprinkler systems.

b. **Fire Protection Features:**

- All structures over 10,000 Sq. Ft. aggregate will require automatic sprinkler protection installed.
- Buildings greater than 10,000 sqft, 3-stories of more or over 35 feet, or classified as High Hazard, are required to meet fire lane marking requirements.
- Show Fire Department Connection location (Must be within 300 feet of fire hydrant), and detail as shown in the DSFPR.
- Show Fire Lanes and Sign Detail as shown in DSFPR

c. **Accessibility:**

- All premises, which the fire department may be called upon to protect in case of fire, and which are not readily accessible from public roads, shall be provided with suitable gates and access roads, and fire lanes so that all buildings on the premises are accessible to fire apparatus. This means that the access road to the subdivision from Chestnut Hill Rd must be constructed so fire department apparatus may negotiate it.
- Fire department access shall be provided in such a manner so that fire apparatus will be able to locate within 100 ft. of the front door.
- Any dead end road more than 300 feet in length shall be provided with a turn-around or cul-de-sac arranged such that fire apparatus will be able to turn around by making not more than one backing maneuver. The minimum paved radius of the cul-de-sac shall be 38 feet. The dimensions of the cul-de-sac or turn-around shall be shown on the final plans. Also,



please be advised that parking is prohibited in the cul-de-sac or turn around.

- The use of speed bumps or other methods of traffic speed reduction must be in accordance with Department of Transportation requirements.
- The local Fire Chief, prior to any submission to our Agency, shall approve in writing the use of gates that limit fire department access into and out of the development or property.

d. **Gas Piping and System Information**

- Provide type of fuel proposed, and show locations of bulk containers on plan.

e. Required **Notes:**

- Provide a note on the final plans submitted for review to read “ All fire lanes, fire hydrants, and fire department connections shall be marked in accordance with the Delaware State Fire Prevention Regulations”
- Proposed Use
- Alpha or Numerical Labels for each building/unit for sites with multiple buildings/units
- Square footage of each structure (Total of all Floors)
- National Fire Protection Association (NFPA) Construction Type
- Maximum Height of Buildings (including number of stories)
- Note indicating if building is to be sprinklered
- Name of Water Provider
- Letter from Water Provider approving the system layout
- Provide Lock Box Note (as detailed in DSFPR) if Building is to be sprinklered
- Provide Road Names, even for County Roads

Preliminary meetings with fire protection specialists are encouraged prior to formal submittal. Please call for appointment. Applications and brochures can be downloaded from our website: [www.delawarestatefiremarshal.com](http://www.delawarestatefiremarshal.com), technical services link, plan review, applications or brochures.

**Department of Agriculture - Contact: Milton Melendez 698-4500**

The Delaware Department of Agriculture has no objections to the proposed new school. However, the Delaware Forest Service does encourage the school district to consider the following:

*Right Tree for the Right Place*

The Delaware Department of Agriculture Forest Service encourages the developer to use the “Right Tree for the Right Place” for any design considerations. This concept allows for the proper placement of trees to increase property values in upwards of 25% of appraised value and will reduce heating and cooling costs on average by 20 to 35 dollars per month. In addition, a landscape design that encompasses this approach will avoid future maintenance cost to the property owner and ensure a lasting forest resource.

*Native Landscapes*

The Delaware Department of Agriculture and the Delaware Forest Service encourages the developer to use native trees and shrubs to buffer the property from the adjacent land-use activities near this site. A properly designed forested buffer can create wildlife habitat corridors and improve air quality to the area by removing six to eight tons of carbon dioxide annually and will clean our rivers and creeks of storm-water run-off pollutants. To learn more about acceptable native trees and how to avoid plants considered invasive to our local landscapes, please contact the Delaware Department of Agriculture Plant Industry Section at (302) 698-4500.

**Public Service Commission - Contact: Andrea Maucher 739-4247**

Any expansion of natural gas or installation of a closed propane system must fall within Pipeline Safety guidelines. Contact: Malak Michael at (302) 739-4247.

**Department of Education – Contact: John Marinucci 739-4658**

The Department of Education supports the Christina School District Sterck School for the Deaf project and the existing site location was evidenced by the design funding authorized in the FY-06 Bond Bill. DOE continues to support the approval of this project.

**Following receipt of this letter and upon filing of an application with the local jurisdiction, the applicant shall provide to the local jurisdiction and the Office of State Planning Coordination a written response to comments received as a result of the pre-application process, noting whether comments were incorporated into the project design or not and the reason therefore.**

Thank you for the opportunity to review this project. If you have any questions, please contact me at 302-739-3090.

Sincerely,

A handwritten signature in dark ink, appearing to read "C. Holland", is positioned above the typed name.

For Constance C. Holland, AICP  
Director

CC: New Castle County